WEEKLY CROP UPDATE

UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 29, Issue 23 **August 27, 2021**

Vegetable Crops

Vegetable Crop Insect Scouting – *David Owens, Extension Entomologist,* owensd@udel.edu

Tomato
Continue treating for **tomato fruitworm**. Moth flight has been heavy. Also look for the characteristic yellow starburst pattern of **stink bug** feeding on the fruit. Excellent stink bug products include Assail and Venom or Scorpion, but these will not protect from worms. **Spider mites** continue to be active. Scout for mites by examining upper terminal leaflets. Treatment is generally advised when mite counts exceed 4 per leaflet.

Cole Crops
We transplanted our cabbage Lep trial this past week and had **cabbage whites** oviposit on them as soon as the transplants were in the ground. **All other cabbage pests are active**. Thresholds for early transplants are 20% infested plants early, rising to 30% until early cupping. Harlequin bugs are also active and may require treatment. Neonicotinoids will provide excellent control without destroying the natural enemy complex, but will not provide worm control alone. Two premixes that contain both a neonic and a dimaide are Durivo and Voliam Flexi. Be sure to factor the diamide into your rotation scheme.

Squash
For those of our readers who are in Virginia, southern Maryland, or on the southern eastern shore, be careful to scout for **pickleworm**. The following is taken from Virginia Tech's Ag Pest Advisory post by Dr. Lorena Lopez stationed at the Eastern Shore AREC in Painter from August 26:

"Both melonworms and pickleworms have been detected in squash plantings yesterday in Cape Charles and Machipongo farms. Approximately, 80% of the plants showed at least one flower bud/fruit with borrowing injuries. Most of the squash fruit and flower buds contained 1-2 melonworms in the latest stages of their larval development (4th-5th instar). Pickleworms on the other hand, have just started to show up in the area and only 1st to 3rd larval instars were found, most of them on top of flower buds and growing fruit. Both pests were also detected in one cucumber planting on approximately 30% of the plants sampled. These pests have been detected in squash plantings in Blacksburg this week at a lower infestation rate compared to the Eastern Shore.

Well-timed insecticide applications are crucial for the management of these pests and recently hatched caterpillars that haven't borrowed into the plant tissue are more susceptible to insecticides. However, once they borrow inside fruits and flower buds, contact insecticides are usually not enough to suppress these pests. The use of systemic insecticides is preferred.

***Useful tip**: Pickleworms and melonworms are NOT the same as squash vine borers. Squash vine borers borrow into the stems causing severe damage and eventually plant death, unlike pickleworms and melonworms that feed mostly on the reproductive parts of the plant and occasionally the leaves.*

If you find borrowing damage in cucurbit crops on your respective farm or gardens, ***please contact me at*** lorelopezq257@vt.edu.*"*

Sweet Corn
Trap counts remain elevated across the trap network, with most sites indicating a 2-3 day spray schedule. Guidance is essentially unchanged from last week, high temperatures for the next several days dictate a tighter spray schedule on account of moth eggs requiring less time to hatch. Concentrate sprays around the first 10 days of silking. Trap counts from Thursday are as follows:

Trap Location	BLT - CEW	Pheromone CEW
	3 nights total catch	
Dover	2	178
Harrington	1	94
Milford	2	146
Rising Sun	1	154
Wyoming	0	68
Bridgeville	1	51
Concord	2	116
Georgetown	1	53
Greenwood	0	73
Laurel	2	121
Seaford	9	---
Lewes	---	126

Other Disorders of Cole Crops

– Gordon Johnson, Extension Vegetable & Fruit Specialist; gcjohn@udel.edu

In last week's issue, sulfur, boron, and calcium deficiencies of cole crops such as tip burn were discussed. The following are other disorders that may occur in these crops.

Hollow Stem in Broccoli and Cauliflower Not Caused by Boron Deficiency
This condition starts with gaps that develop in the tissues. These gradually enlarge to create a hollow stem. Ordinarily, there is no discoloration of the surface of these openings at harvest but both discoloration and tissue breakdown may develop soon after harvest. Some cultivars of hybrid cauliflower and broccoli may have openings from the stem into the head. Both plant spacing and the rate of nitrogen affect the incidence of hollow stem. Hollow stem increases with wider spacing and as the rate of nitrogen increases. The incidence of hollow stem can be greatly reduced by increasing the plant population.

Cabbage Splitting
Cabbage splitting is mainly a problem with early cabbage. A problem can develop when moisture stress is followed by heavy rain. The rapid growth rate associated with rain, high temperatures and high fertility cause the splitting. Proper irrigation may help prevent splitting and there are significant differences between cultivars in their susceptibility to this problem. Splitting may also be partially avoided by deep cultivation to break some of the plant roots.

Cauliflower and Broccoli Buttoning
Buttoning is the premature formation of a head and because the head forms early in the plant's life, the leaves are not large enough to nourish the curd to a marketable size. Buttoning may occur shortly after planting in the field, when normal plants of the same age should be growing vegetatively. Losses are usually most severe when transplants have gone past the juvenile stage before setting in the field. Stress factors such as low soil nitrogen, low soil moisture, disease, insects, or micronutrient deficiencies can also cause this problem. Some cultivars, particularly early ones, are more susceptible to buttoning than others.

Lack of Heads in Broccoli and Cauliflower
During periods of extremely warm weather (days over 86˚F and nights 77˚F) broccoli and cauliflower can remain vegetative (does not head) since they do not receive enough cold for head formation. This can cause a problem in scheduling the marketing of even volumes of crop.

Cauliflower Blanching and Off Colors
The market demands cauliflower which is pure white or pale cream in color. Heads exposed to sunlight develop a yellow and/or red to purple pigment. Certain varieties such as Snow Crown are more susceptible to purple off-colors,

especially in hot weather. Self-blanching varieties have been developed to reduce problems with curd yellowing. For open headed varieties, the usual method to exclude light is to tie the outer leaves when the curd is 8 cm in diameter. Leaves may also be broken over the curd to prevent yellowing. In hot weather blanching may take 3 to 4 days, but in cool weather, 8 to 12 days or more may be required. Cauliflower fields scheduled to mature in cool weather (September and October) that are well supplied with water and planted with "self-blanching" cultivars will not need tying. Newer orange cauliflower and green broccoflower varieties are being planted. They are less susceptible to off-colors but still can develop purpling under warm conditions.

Cauliflower Ricing
"Riciness" and "fuzziness" in heads is caused by high temperatures, exposure to direct sun, too rapid growth after the head is formed, high humidity, or high nitrogen. "Ricing" is where the flower buds develop, elongate and separate, making the curd unmarketable.

Development of Curd Bracts in Cauliflower
Curd bracts or small green leaves between the segments of the curd in cauliflower is caused by too high of temperature or drought. High temperatures cause a reversion to vegetative growth with production of bracts on the head. In a marketable cauliflower head, the individual flower buds are undeveloped and undifferentiated.

Loose Heads in Cauliflower and Premature Flowering in Broccoli
Loosely formed curds in cauliflower can be due to any stress that slows growth making them small or open. Fluctuating temperatures and moisture will also cause less compact growth. In contrast, excess vegetative growth caused by excessive nitrogen can also cause loose heads in cauliflower and broccoli. Premature flowering and open heads in broccoli can be brought on by high temperatures.

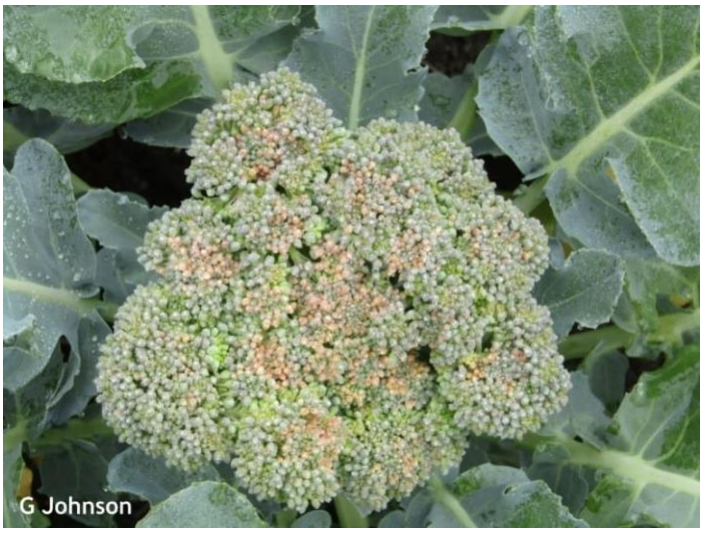
Edema on Cole Crop Leaves
Edema is water blistering on Cole crop leaves. The most common cause of edema is the presence of abundant, warm soil water and a cool, moist atmosphere. Under these conditions the roots absorb water at a rate faster than is lost through transpiration. Excess water accumulates in the leaf, some parenchyma cells enlarge and block the stomatal openings through which water vapor is normally released from the plant; thereby contributing to further water retention in the leaf. If this condition persists, the enlarged cells divide, differentiate a cork cambium, and develop elongate cork cells externally to form a periderm. The rupture of the epidermis by the enlarged inner cells and the periderm account for the raised, crusty appearance of older edema spots.

Black Petiole
Black petiole or black midrib is an internal disorder of cabbage that has been occasionally noted in recent years. As heads approach maturity, the back side of the internal leaf petioles or midribs turn dark gray or black at or near the point where the midrib attaches to the core. The affected area may be quite limited or may extend for 2 or 3 inches along the midrib. It is believed that this disorder is associated with a potassium (K)-phosphorus (P) imbalance and results when the K level in the soil is low and the P concentration high. High rates of nitrogen may contribute to the problem. Probably, as in the case with tip burn, black petiole is a complex physiological disorder in which environmental conditions play an important role in symptom expression. Variety evaluation trials have shown that there are differences in degree of susceptibility between varieties.

Floret (Bead) Yellowing in Broccoli
The florets are the most perishable part of the broccoli head; yellowing may be due to over maturity at harvest, high storage temperatures after harvest, and/or exposure to ethylene. Any development of yellow beads ends commercial marketability. Bead yellowing due to senescence should not be confused with the yellow to light-green color of areas of florets not exposed to light during growth, sometimes called "marginal yellowing".

Brown Floret (Bead) in Broccoli
This is a disorder in which areas of florets do not develop correctly, die and lead to brown discolored areas. This is thought to be caused by excess heat during head initiation but also may

be due to feeding damage on florets from insects such as harlequin bugs.



Brown bead in broccoli

Grasshoppers in High Populations – *Jerry Brust, IPM Vegetable Specialist, University of Maryland*, jbrust@umd.edu

This season keeps with the weird and unusual with reports of grasshoppers causing damage in many different vegetables. I thought this was just an unfortunate farm that was having problems with them, but I have gotten calls from growers in central and northern Maryland as well as the Eastern shore about them. There are many grasshopper species, some of the more common ones are: the American grasshopper *Schistocerca Americana*, Differential grasshopper *Melanoplus differentialis* and the Carolina grasshopper *Dissosteira carolina*. Normally I would expect some movement out of grain fields into meadows and along rights-of-way in July with some movement into vegetables in August, but this has been a good year for grasshoppers and we have some major movement into vegetable fields now.

Normally we just let the grasshoppers go as they usually move in and out of fields rather quickly. However on some farms they have taken up residence in some odd vegetables such as cantaloupe (Fig. 1) and peppers and need to be treated. Pyrethroids are probably the best control, but these should be sprayed in late evening and even at night to avoid bee kills. Organically there is not much that actually does any good; some of the baits that can be used work best on smaller (younger) grasshoppers, but poorly on adults.


Figure 1. Grasshoppers in cantaloupe

Plectosporium Blight in Some Pumpkin Fields This Year – *Jerry Brust, IPM Vegetable Specialist, University of Maryland*, jbrust@umd.edu

I am seeing some plectosporium blight in a few pumpkin fields this year, not as bad as last year but still there. This disease will probably increase if we continue having frequent rains in some locations. This fungal disease of pumpkin, zucchini and squash can cause yield loss if left uncontrolled. Plectosporium blight prefers warm, humid or rainy weather conditions. It overwinters on crop residue and can persist in the soil for several years. Plectosporium blight can be recognized from the small white to light tan spots on leaves (Fig. 1) and elongated lesions on stems and leaf petioles (Fig. 2). On green fruit the lesions are very small white to tan flecks (Fig. 3a) on more mature fruit the lesions are round to irregular shaped pimples on the surface of the pumpkin that often makes them unmarketable (Fig. 3b). These fruit lesions also allow soft rot pathogens to penetrate into the pumpkin that will cause the fruit to 'melt-down' into a deflated mess. When stem and foliar lesions occur in large numbers they can give a

light gray or white appearance to the foliage. As the lesions increase in numbers and merge they turn the vines and leaf petioles white (Fig. 2). Severely infected pumpkin stems or petioles will become brittle and can split or shatter if disturbed (Fig. 2).

When Plectosporium blight occurs, rotate away from summer squash and pumpkins for 2 years. Scout for disease and apply fungicides when disease first occurs. Thorough coverage of foliage, vines, and fruit is necessary for good control. Most of the time a protective spray of chlorothalonil or mancozeb will give you good protection from this disease, however in years like this one where some of us have had frequent heavy rains the disease control needs a boost with the addition to the protective sprays of using something in rotation such as Cabrio or Flint Extra.

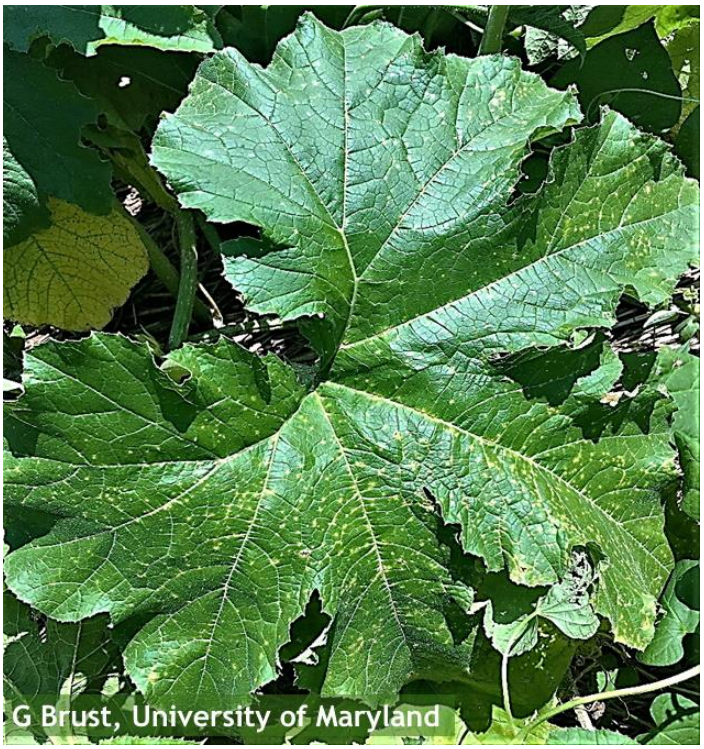


Figure 1. Plectosporium yellow-tan spots (lesions) on pumpkin leaf

Figure 2. Plectosporium on pumpkin leaf petioles-the petiole to the far right has split.

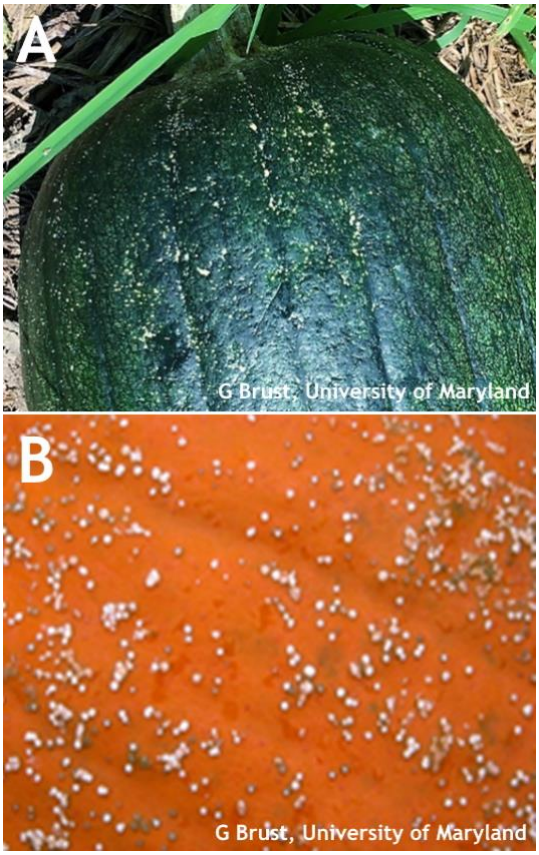


Figure 3. Plectosporium lesions on green fruit (A) and on orange fruit (B)

Fruit Crops

Netting to Control Birds in Vineyards – *Gordon Johnson, Extension Vegetable & Fruit Specialist;* gcjohn@udel.edu

Vineyard managers should take care to control birds at this time when sugar contents are peaking in grapes, making them a highly desirable food source. Netting is probably the most effective control method, followed by scaring devices.

It is possible to completely exclude birds from the grapes by netting the vines. The initial expense of the netting is quite high, but when amortized over the life of the netting (5-10 years) it becomes much more affordable. Applying and removing the netting are labor-intensive tasks. However, a number of bird netting implements have been designed that dramatically reduce the time and labor required to making bird netting more feasible. If the netting is just draped over the grapevines, birds have a knack for finding ways to get under the netting to feed. Therefore, it may be necessary to pin the ends of the netting together under the vines

Multiple layers of hay bale net wrap has been used as an alternative to the expensive bird netting. It is inexpensive and can be replaced each season.

Bird netting in grapes.

Applying multiple layers of hay bale wrap as bird netting in grapes.

Agronomic Crops

Agronomic Crop Insect Scouting – *David Owens, Extension Entomologist,* owensd@udel.edu

Soybean

Reports are starting to come in of threshold levels of **corn earworm** in soybean. As a reminder, NCSU has a good earworm threshold calculator: https://www.ces.ncsu.edu/wp-content/uploads/2017/08/CEW-calculator-v0.006.html. Moths were active last week in fields with flowers, and worms are being found in fields as late as R4.5. If using a pyrethroid, use the highest label rate, as good control is not guaranteed. The product Hero, when used at its high rate, is essentially a mix of two pyrethroids at their individual high rates. Our control recommendation guide can be found here: https://www.udel.edu/content/dam/udelImages/canr/pdfs/extension/sustainable-agriculture/pest-management/Insect_Control_in_Soybeans_-_2020_-_David_Owens.pdf. When scouting and selecting insecticides, pay careful attention to the green worm complex. **Soybean loopers** are present in the area at low populations but can be flared up with pyrethroid and organophosphate use.

Sorghum

Sugarcane aphids are present in the region but so far are still spotty. Although I am optimistic that it has arrived late enough in the season and that forecast cooler weather will slow them down, it is still important to regularly scout for them. In hot weather, their reproductive rate is phenomenally fast. They can cause yield loss to drought stressed sorghum as late as the soft dough stage. Thresholds are generally between 40 and 125 per leaf, or 30% infested plants with localized areas with honeydew present. The only effective insecticides are Sefina, Sivanto, and Transform. Lorsban and Dimethoate suppress them for only a short period of time.

Last week, corn earworm were observed resting and flying in sorghum heads. Be sure to scout for earworm in all sorghum fields that are or were recently shedding pollen. Texas A&M has an excellent threshold calculator and earworm size guidance here: https://extensionentomology.tamu.edu/sorghum-headworm-calculator/.

Hemp

Scout buds carefully for early instar **corn earworm**. Second instars generally are an orangish color with black near the hair bases, and the raised tubercles with microspines give them a slightly bumpy appearance. If treatments have not yet started, they will probably be necessary this week. The best products in Virginia Tech trials have been virus products followed by Bt. Use high water rates to achieve good coverage.

Scouting for Stalk Rots in Corn

– *Alyssa Koehler, Extension Field Crops Pathologist*; akoehler@udel.edu

Over the past week, I have begun to see plants with accelerated senescence due to stalk rots (Figure 1). After pollination, the ear becomes the major sink of sugars produced by the plant. If a stress event occurs, plants will divert or remobilize sugars from the stalk and roots to meet the needs of the developing ear. Often the pathogens that cause stalk rots are opportunistic and take advantage of plants that have been weakened by potential stress events (drought, flooding, hail, insect damage, foliar disease damage, etc.).

Figure 1. Corn stalk with accelerated plant senescence

We typically observe multiple stalk rots including Anthracnose top dieback or stalk rot, Diplodia stalk rot, charcoal rot, and Gibberella stalk rot. Anthracnose stalk rot is caused by the fungus *Colletotricum graminicola* (the same organism that causes anthracnose leaf blight), but the disease phases are considered to be separate. When stalk rot symptoms appear in the upper canopy first, this is called anthracnose top dieback (Figure 2). Cloudy, warm humid weather after silking can favor this disease. In Diplodia stalk rot, there is no red or pink coloration in the tissue. Black specks (pycnidia) can be observed embedded in the stalk tissue (Figure 3). Diplodia stalk rot is generally caused by *Stenocarpella maydis*, but *Stenocarpella macrospora*, the causal agent of Diplodia leaf streak, can also infect ears and stalks. This season we have observed Diplodia stalk rot

caused by both pathogens (Figure 4). Charcoal rot is caused by the fungus *Macrophomina phaseolina,* which is the same organism that causes charcoal rot in soybeans. This disease is favored by hot, dry weather. The fungus moves through the roots and lower stems into the stalk where many small structures called microsclerotia give the inside of the stalk a speckled appearance. Another common stalk rot in our area is Giberella stalk rot. Affected plants may wilt and have premature loss of green tissue. Plants often lodge at the nodes and there will be reddish-pink discoloration within the stalk (Figure 5). Small black structures (perithecia) can form at the internodes. Unlike the structures associated with Diplodia, these are superficial and can be easily scraped away from the stalk surface (Figure 6). Red root rot is another disease that can look similar. With red root rot, discoloration is usually darker (Figure 7) and any black structures at the base of the plant (pycnidia) will be embedded in the stalk tissue.

Figure 2. Corn plant with anthracnose top dieback

Figure 3. Diplodia stalk rot with embedded pycnidia in lower stalk tissue

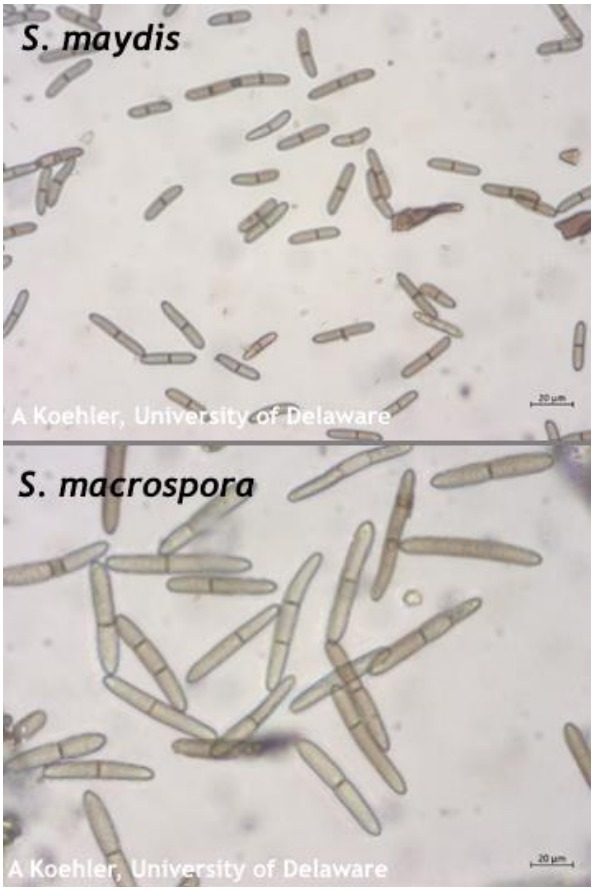


Figure 4: Spores recovered from corn stalks with Diplodia Stalk Rot. *S. maydis* (top) is most commonly associated with Dioplodia stalk rot. *S. macrospora* (bottom) causes Diplodia leaf streak, but can also infect stalks and ears

Figure 5. Pink discoloration in the stalk from Gibberella stalk rot

Figure 6. Giberella stalk rot with easily removed black perithecia at the base of the stalk

Figure 7. Red root rot (*Phoma terrestris)* symptoms on corn roots

When plants are a few weeks from physiological maturity (kernel black layer), stalk rots can be scouted by walking the field in a W pattern and randomly checking stalks with either the pinch or push test. (Aim to check 10-20 plants for every 10-20 acres). For the pinch test, pinch the stalk between the lowest two internodes to see if it can withstand the pressure, if the stalk collapses, it fails. To complete a push test, push the stalk 30 degrees from vertical (around 8 inches) and see how many spring back to upright and how many lodge. In cases where more than 10% of plants are lodging, you may want to consider harvesting at higher moisture and drying grain after harvest to avoid yield loss due to lodging. Since stalk rots are linked to stress, the best management strategies are to reduce stress by planting optimal stand populations, monitoring field moisture (in cases where irrigation is possible), managing insect pests and foliar diseases, and using a balanced nutritional program. Planting hybrids with some level of foliar disease resistance can also help to reduce plant stress and encourage strong stalk development. Current research projects in my lab are also investigating the connection of early season disease issues, such as Pythium root rot, on susceptibility to stalk rots.

Differentiating Diseases in Soybean

– *Alyssa Koehler, Extension Field Crops Pathologist*; akoehler@udel.edu

Just as we have seen more disease presence in corn over the past week, soybeans are also beginning to show symptoms of diseases that have accumulated through the season. One of the most frequent calls I have been receiving is soybean sudden death or SDS. Infection by the causal fungus *Fusarium virguliforme* usually occurs within the first 2 to 3 weeks after germination, but the level of symptom development varies greatly from year to year. Infection is favored by early planting into cool and wet soils and often is in combination with infection by soybean cyst nematodes (SCN). Symptoms of SDS do not usually develop until late in the season and are typically worse in years with heavy rainfall (or in irrigated fields). The weather patterns of the past few weeks with

drought stress followed by abundant rain are tracking for the right environment to see disease.

Symptoms begin in the roots where the vascular tissue of the taproot becomes brown. While this can extend into the lower stem, these symptoms are not visible much above the soil line. The symptoms that really stick out are the patchy yellow lesions in the leaves that expand between the veins to brown lesions surrounded by chlorotic areas. While this can look very distinctive, it is important to remember that this leaf symptom can actually appear following infection by multiple organisms. Other diseases with similar symptoms include various stages of infection by the fungus *Diaporthe* (stem canker, pod and stem blight, seed decay), brown stem rot (BSR), charcoal rot, and others. While there are often exceptions to the rules or cases where multiple diseases can be present at the same time, the table below can be a starting point for separating some of our common soybean diseases (Table 1). The key is that leaves do not tell the whole story, so it is important to look closely at the base of the stem/roots and split stems to see what is happening within. One of the diagnostic signs for SDS are the blueish structures (sporodochia) at the base of the plant near the soil line. These can turn white once exposed to air, so it is best to look for them right as you are digging plants or if you have had plants incubating. Splitting stems is another way to sort out SDS, BSR, and charcoal rot. When splitting stems, SDS usually has brown outer vascular tissue (cortex), while BSR is brown in the center (pith) and the vascular tissue is usually still healthy looking. Charcoal rot will have numerous black dots called microsclerotia that are present on the outer stem and within the stem (Figure 1). Diseases from *Diaporthe* spp. will tend to have healthy looking vascular and pith tissue, but you may see black zone lines.

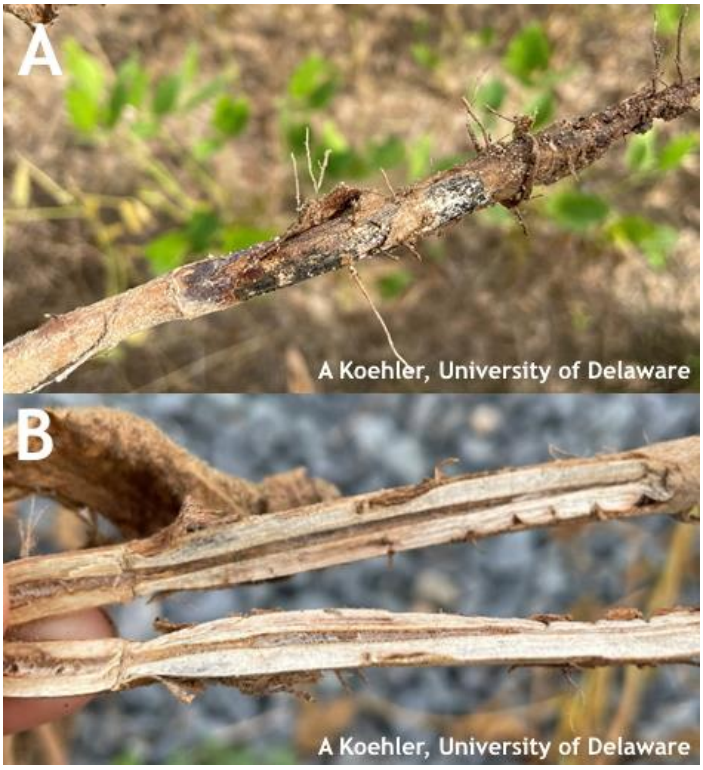


Figure 1. Microsclerotia of the fungus *Macrophomina phaseolina* causing charcoal rot in soybean. On the outside (A) and within a soybean stem (B)

Table 1: Sorting out soybean diseases with similar foliar symptoms

	Diaporthe species	Sudden Death Syndrome	Brown Stem Rot
Leaves	Leaves typically stay attached.	Leaves fall off, can look like deer browsing.	Leaves typically stay attached.
Symptom	 Foliar symptoms from stem canker/pod and stem blight caused by *Diaporthe* species	 Foliar symptoms from SDS caused by *Fusarium virguliforme*	 Foliar and stem symptoms of brown stem rot. Photo: https://cropprotectionnetwork.org/resources/articles/diseases/brown-stem-rot-of-soybean
Sign	 Small black dots (pycnidia) may be in rows on stem tissue	 Blue sporodochia at the base of a soybean plant with SDS. Blue will often fade to white after exposure to air, so check soon after pulling up the plant.	none
Taproot	 Split stem has limited discoloration and may have zone lines.	 Browning on either side of the interior. Roots will be discolored.	 Browning in the pith. BSR does not affect roots.

General

Chlorpyrifos Update – *David Owens, Extension Entomologist*, owensd@udel.edu

EPA announced last week that they plan to revoke food tolerances for chlorpyrifos, effective as early as this winter: https://www.epa.gov/ingredients-used-pesticide-products/chlorpyrifos. This could effectively eliminate most uses between now and the next growing season. Stay tuned, there are several points of clarification that we are waiting for (remaining sites and use patterns, if any, existing stock drawdown). In the meantime, there are a couple dozen labeled products with chlorpyrifos active ingredient, including Cobalt, Frenzy Attack, Govern, Hatchet, Lambdafos, Lock-On, Lorsban, Match-Up, Saurus, Stallion, Storcide, Tundra Supreme, Vesper, Voltage Edurx, Vulcan, Warhawk, Whirlwind, and Yuma.

Guess The Pest! Week 20 Answer: Garden Fleahopper *David Owens, Extension Entomologist*, owensd@udel.edu

Last week's Guess The Pest may have been a bit unfair, as the critter just causes cosmetic injury and is not generally considered a yield threat. The black spots are fecal pellets from garden fleahopper! This is a very common insect that can be somewhat noticeable in soybean as well.

Guess The Pest! Week 21 – *David Owens, Extension Entomologist*, owensd@udel.edu

Get out your field guides and practice your pest management knowledge by clicking on the GUESS THE PEST logo or following this link: http://www.udel.edu/008255 and submitting your best guess. For the 2021 season, we will have an "end of season" raffle for a scouting toolkit for one lucky winner, and five winners will be sent a small jar of locally produced honey. Remember, you can't win if you don't play!

This week, our theme is watermelon damage, some made worse by recent heavy rains and some by other causes.

Go to http://www.udel.edu/008255 to Guess the Pest!

Announcements

Pesticide Safety Exam Reviews

Beginning in March the Delaware Department of Agriculture Pesticide Section will provide a Pre-Certification Pesticide Core Exam Review. This review will provide essential information, covering laws, equipment, personal safety and more to help you prepare for the core certification exam.

The core exam is for private pesticide applicators and a prerequisite for all commercial pesticide applicators.

2021 Pesticide Exam Dates
Wednesday, September 29, 2021
Wednesday, November 17, 2021

Schedule for Exam/Review Dates
Core Exam Review: 9 – 11:30am
Lunch Break
Pesticide Testing for ALL: 1 – 4pm

You may choose to test in the afternoon of the review or on another testing date.

Sign up is free!
Log into your account on dda.force.com/pesticide then click on Exam Registrations.

For more information on this training course and testing please contact Amanda Strouse at amanda.strouse@delaware.gov or 302-698-4575.

COVID-19 Vaccination Opportunities in Delaware

COVID-19 vaccination is currently available to Delawareans ages 12+ at numerous sites throughout the state. Some sites require an appointment and others offer walk-in hours. Information about vaccine sites and appointments is online at https://coronavirus.delaware.gov/vaccine/where-can-i-get-my-vaccine/.

Mental Health First Aid Training

What is this training about?
The Mental Health First Aid training is an 8 hour evidence based program that introduces participants to risk factors and warning signs of mental illnesses, builds understanding of their impact, and overviews common ways to help and find support. Using interactive educational methods, you'll learn how to offer initial help in a mental health crisis and how to connect with the appropriate level of care. You will also receive a list of community healthcare providers and national resources, support groups, and online tools for mental health and addictions treatment and support.

What is the training format?
The course will be offered in two parts. The first part is offered online in a self-study format, takes about 2 hours, and needs to be completed before the live session. The second part will be offered live and virtually via a Zoom connection. This session will be held from 9am-3pm. You will receive the link for the self-paced session and Zoom info for the live session after you have registered. You need to register by the dates listed below to be able to attend the schedule live Zoom training date.

Why attend?
In Delaware our agriculture community is facing many stressors. Those who are in the position to consult and aid them need to know the signs, symptoms and strategies to best serve them. Farm family members also need to know how best to help their loved ones. This training is being taught by instructors from the Delaware Mental Health Association.

A certificate of completion is provided to attendees who attend all 8 hours of the training.

There are four dates for the Zoom session. Seating is limited. Please choose only one:

Mental Health First Aid Zoom Sessions with Registration Links

Friday, October 5, 2021 9 a.m.–3 p.m. Register by September 5
https://www.pcsreg.com/mental-health-first-aid-training-oct-2021

This training is underwritten by the Sustainable Coastal Communities Project, Delaware Farm Bureau and University of Delaware Cooperative Extension. These organizations are equal opportunity providers.

Extension302 Podcast

Episode 23: The Good, The Bad & The Buggy

UD Extension's resident Agricultural Entomologist talks about insects, bug jokes and crops in this episode of Extension302!

To listen, go to:
https://www.udel.edu/academics/colleges/canr/cooperative-extension/about/podcast/

Virtual Professional Development Opportunity

Presented by DSU Cooperative Extension & Northeast SARE

With guest, Dr. Nancy Franz
Professor Emeritus, Iowa State University, School of Education

Improving Your Outreach Strategy
September 8, 2021, 10:00-11:30 AM (EDT)

Using situation analysis and needs assessment techniques to better serve your constituents and be more efficient.

Register for either or both here:
https://forms.gle/9MyG6FKdgDnCdvSZ8

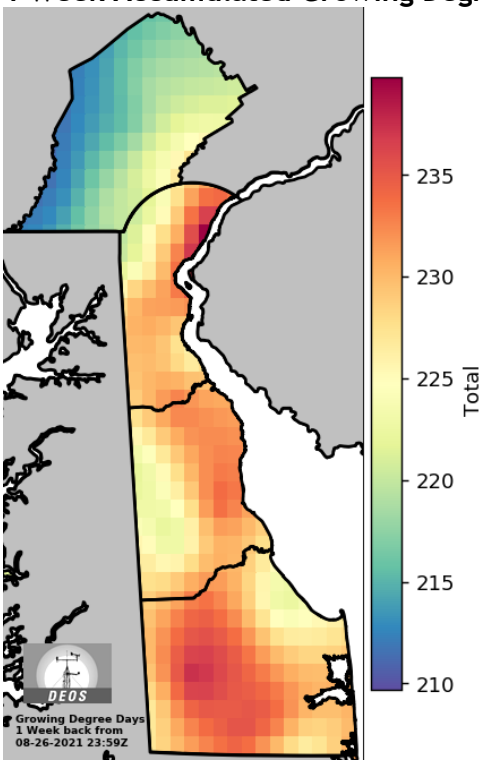
Email jchallandes@desu.edu if you have any questions.

Cooperative Education in Agriculture, Youth Development, and Home Economics. Delaware State University, University of Delaware and the United States Department of Agriculture cooperating, Dr. Dyremple B.

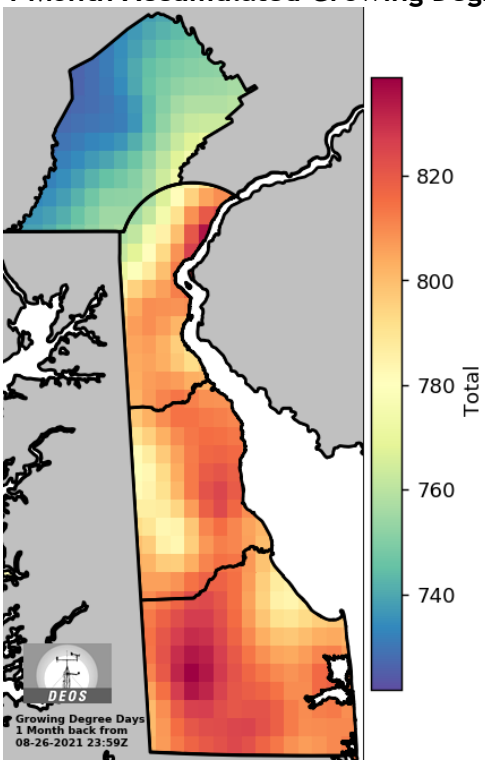
Marsh, Dean and Administrator. It is the policy of the Delaware Cooperative Extension System that no person shall be subjected to discrimination on the grounds of race, color, sex, disability, age, or national origin.

Weather Summary

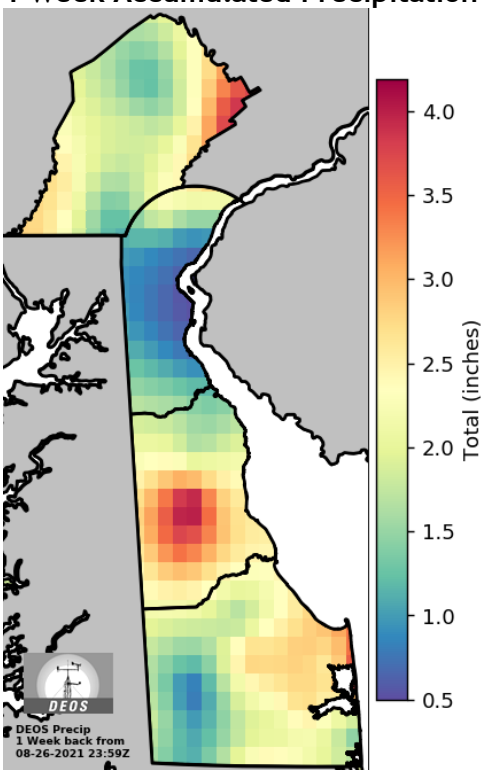
1 Week Accumulated Growing Degree Days



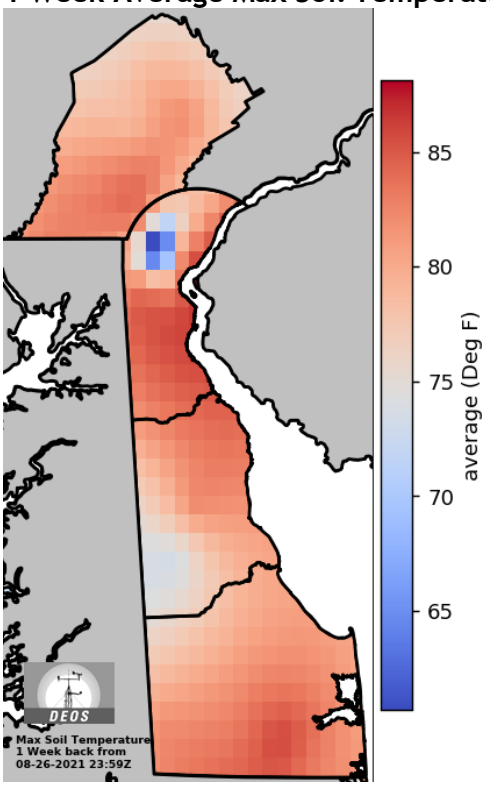
1 Month Accumulated Growing Degree Days



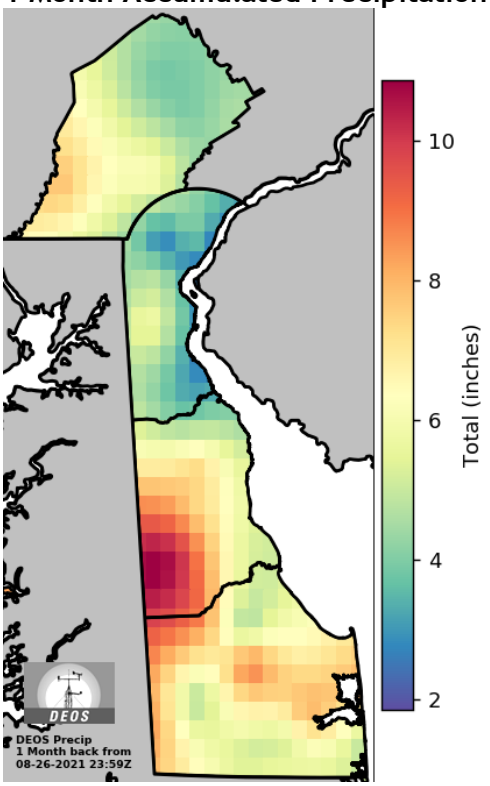
1 Week Accumulated Precipitation



1 Week Average Max Soil Temperature



1 Month Accumulated Precipitation



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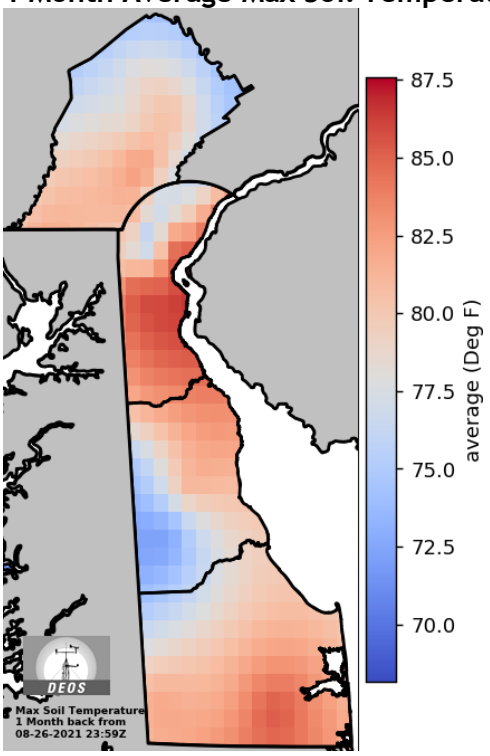

These weather maps are generated from DEOS weather station data and are part of a new Ag Weather website that is under development. Your feedback is welcome!
Thanks!! Emmalea (emmalea@udel.edu)

Weekly Crop Update is compiled and edited by Emmalea Ernest, Scientist – Vegetable Crops